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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Andy P. Annadurai

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EXAMINER

JONES, PRENELL P

ART UNIT

PAPER NUMBER

2668

DATE MAILED: 01/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/988,896

Applicant(s)

ANNADURAI ET AL.

Examiner

Prenell P. Jones

Art Unit

2668

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1-6 and 13-19 is/are allowed.
- 6) ☐ Claim(s) 7 and 9 is/are rejected.
- 7) ☐ Claim(s) 8, 10 and 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments with respect to claims 1-11 and 13-19 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
4. Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al (US PAT. 5,719,862) in view of Henderson et al (US PAT 5,022,056).

Regarding claim 7, Lee packet-based de-skewing and clock synchronization for a network wherein multiple data-bits are communicated over a data bus to a framer (Abstract,

Figs. 3, 5 & 10, MAC devices manufactured in a standard IC package, architecture includes a MAC module includes framer communicating with de-skew via switch, inputs are selected, skew measurements is determined by phase comparison, inputs selected with respect to desired delay (col. 2, line 55-67, col. 4, line 55-65, col. 8, line 14-67). Lee is silent on inputs for receiving data wherein a input is selected if there is no skew, selecting an input if there is a late skew and selecting an input if there is a early skew. In a communication system that synchronizes a clock with the use of comparing delay clock signals, Henderson discloses synchronizing clocks, whereby delayed signals are compared in order to select appropriate input for data, determination of which delay clock signal is closest in phase to receiver as to provide coherent clocks, whereby input is selected if there is no skew, selecting an input if there is a late skew and selecting an input if there is a early skew (Abstract, Fig. 1, col. 1, line 59 thru col. 2, line 23, an input is recognized when no delay/skew data is transmitted, an input is selected for wherein the data speed is moderately slow/late data, and an input is selected for when the speeds are significantly higher/early data (col. 3, line 15-46, col. 4, line 8-67, col. 5, line 4-15). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement selecting an input if there is no skew, selecting an input if there is a late skew and selecting an input if there is a early skew as taught by Henderson with the teachings of Lee for the purpose of further managing/monitor incoming data with respect to clock phase as to provide coherent clocks.

Regarding claim 9, Henderson further discloses, data input, wherein the clock signal of the third input is at least one clock cycle later than the data for the first input (Fig. 3).

Allowable Subject Matter

1. Claims 1-6 and 13-19 are allowed over prior art.
2. The following is an examiner's statement of reasons for allowance: Applicant has amended claim 1 to corrected previous 112 rejection, and Applicant has canceled previously rejected claim 12.
3. Claims 8, 10 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Although the combined prior art teaches an architecture that includes multiple latches coupled to a multiplexer and encryption means that performs communicating data between transmitter and receiver, de-skewing and skewing communication channels which are coupled to delay stacks, de-skewing method as associated in a SONET environment wherein the architecture includes a framer, de-skewing circuits that utilize phase detectors, and the skewing and delays are monitored, framer associated in a SONET environment and data arriving on a data bus that is associated with a de-skewing circuitry that consist plurality of latches connected via a data bus whereby delay and clock data is monitored, compared, adjusted, selected and transmitted, they fail to teach or suggest with respect to claim 1, if a late skew is determined, correcting late skew by selecting a second input for receiving plurality of data-bits wherein the bits at the second input are at least one clock cycle earlier than the data-bits for the first input, and if an early skew is determined, correcting early skew by selecting a third input for receiving the plurality of data-bits such that the data-bits at the third input are at least one clock cycle later than the data-bits at the first input, and with respect to claim 13, multiplexer selecting a first data input signal if there exist a late skew at the data bus, or selecting the second data input signal if

Art Unit: 2668

there is no data skew, or selecting a third data input if an early skew exist, with respect to claim 9, data at second input is one clock cycle earlier than data for first input, with respect to claim 10, data at second input is one clock cycle later than data on the data bus, with respect to claim 11, data skew has a maximum skew of +/-1 clock cycle.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prenell P. Jones whose telephone number is 571-272-3180. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Prenell P. Jones

January 26, 2006


CHI PHAM
SUPERVISORY PATENT EXAMINER
ELECTRONIC BUSINESS CENTER
1/26/06